

Species. Filaments slender, attached, tufted, about three-fourths of an inch in height; cells usually about seven times as long as broad, slightly contracted at the joints; endochrome black, contained in a small tube which passes through the cells in a waved manner.

It is not at all easy to make out the structure of this production, unless it be immersed in a solution of iodine, owing to the extreme transparency of the filaments, the dark colouring matter being situated only in the narrow thread which passes up the filaments. To the unassisted sight the filaments are of a blackish-gray colour.

Acton Green, Middlesex: several specimens.

LI.—On some new Insects from Western Africa. By the
Rev. F. W. HOPE, F.R.S., F.L.S.

[Continued from vol. x. p. 95.]

To the Editors of the *Annals of Natural History*.

GENTLEMEN,

FROM illness I have not until now been able to continue the description of the new insects received from Western Africa. Those described at present are remarkable for beauty and richness of colouring, and exhibit all the splendour so peculiar to tropical regions. From the Rev. Mr. Savage I have lately received some additional observations respecting the Goliath Beetles, which it is my intention to transmit to you on a future occasion. In haste,

I remain, yours very sincerely,

February 22, 1843.

F. W. HOPE.

Sp. 35. *Hydaticus discoidalis*, Hope. Long. lin. $5\frac{1}{2}$; lat. lin. 3. Affinis *Hydat. dorsigero*, Dupont, at minor. Oblongo-ovalis, thorace obscure testaceo, suturali parte elytrorum nigra lateribus testaceis, punctis minutisque per discum aspersis, corpore infra ferrugineo, pedibus concoloribus.

Sp. 36. *Hydrous rufofemoratus*. Long. lin. 11; lat. lin. 5. Niger, palpis rufo-testaceis, thorace glabro, elytris quibusdam lineis punctato-striatis, punctis parum distinctis. Corpus infra atrum, femoribus rubris, tibiis nigricantibus nitidis.

Hab. Circa Palmas.

Sp. 37. *Hydrous distinctus*. Long. lin. 9; lat. lin. 4. Niger, forma ovali elongata, palpis rufo-testaceis. Elytra glabra punctis haud sub lente distinguendis. Corpus infra obscure atrum et subtomentosum, femoribus tibiisque nigris et nitidis.

Hab. in Sierra Leona.

There are two other species undescribed in the same collection

from Africa, but they are omitted, being in too bad a state to describe.

Sp. 38. *Ampedus Savagei*, Hope. Long. lin. 9; lat. lin. $2\frac{1}{4}$. Cyaneus, capite thorace pectore femoribusque miniatis, elytris læte cyaneis et striato-punctatis, abdomine nigro et nitido.

Hab. circa Sierram Leonam.

This magnificent insect is named in honour of the Rev. Mr. Savage. The tibiæ and tarsi are unfortunately wanting.

Sp. 39. *Ampedus cyanocephalus*. Long. lin. 6; lat. lin. $1\frac{1}{4}$. Cyaneus, capite concolori antennisque atris. Thorax miniatus et punctatus. Elytra læte cyanea et subtilissime striato-punctata. Corpus infra subcyaneum, abdomine parum rubescente, lateribus thoracis miniatis pedibusque testaceis.

Hab. Cape Palmas.

Sp. 40. *Ampedus auripennis*, Hope. Long. lin. 9; lat. lin. 3. Viridis, antennis atris, thorace convexo, virescenti-punctulato, elytris auratis nitidis, sub lente minutissime punctatis. Corpus infra viride punctulatum, pedibus concoloribus, tarsis spongiosis.

Hab. Circa Palmas.

Sp. 41. *Ampedus Iris*, Hope. Long. lin. 8; lat. lin. 2. Viridis, antennis atris, thorace punctulato versicolori flavoque tomentoso. Elytra concoloria, striato-punctata. Corpus infra rubrum, pedibus pallidioribus.

Hab. Circa Palmas.

Sp. 42. *Ampedus cyanicollis*. Long. lin. 6; lat. lin. $1\frac{1}{2}$. Violaceus, antennis nigris, thorace cyaneo, elytris ad basem auratis nitidis, posticeque cyaneis. Corpus infra pectore viridi, annulis abdominis rufescentibus, pedibus flavis.

Hab. Circa Palmas.

Sp. 43. *Ampedus auricollis*, Hope. Long. lin. 7; lat. lin. $1\frac{3}{4}$. Æneus, antennis atris, thorace læte aureo, elytris striato-punctatis et viridi-æneis. Corpus infra concolor flavoque tomento obsitum, pedibus flavis.

Sp. 44. *Alaus ? interruptus*, Hope. Long. lin. 8; lat. lin. $2\frac{3}{4}$. Affinis *Al. Reicheo*, at minor. Fusco-brunneus, antennis atris, thorace maculis minutis flavis asperso, elytrisque postice abrupte truncatis flavoque irroratis cruceque flava interrupta notatis. Corpus infra pectore flavo-ochraceo colore insignitum, abdomine griseo, pedibusque concoloribus.

Hab. Circa Palmas.

The genus *Alaus* requires subdividing, those from Africa differing considerably from the Asiatic species. The type of the genus belongs to the New World.

Sp. 45. *Agrypnus Tropicus*, Hope. Long. lin. 13; lat. lin. $3\frac{1}{2}$. Affinis *tomentoso* Fab., at minor. Brunneus, thorace nigricanti, elytris striato-punctatis tomentoque ferrugineo vestitis. Corpus infra brunneum.

Hab. Circa Palmas.

Sp. 46. *Agrypnus laticollis*, Hope. Long. lin. 16 ; lat. lin. 6. Niger, antennis pedibusque fusco-ferrugineis, thorace lato punctulato elytrisque fortissime sulcatis, interstitiis crebre punctatis. Corpus subtus atrum, femoribus tibiisque piceis tarsisque auricomatis.

Hab. Circa Palmas.

The above species in Africa seems to represent what *Al. fuscipes*, Fab. does in Asia, and is the largest species yet described.

LONGICORNES.

Sp. 47. *Mallodon Downesii*, Hope. Long. lin. 24 ; lat. lin. 9. Piceus, mandibulis porrectis intusque hirsutis, apicibus 3-dentatis. Thorax fere transverso-quadratus lateribus depressis et serratis, disco in medio elevato, punctisque variis sparsim dispositis. Elytra picea ad suturam mucronata. Corpus infra piceum, annulis abdominis postice rufescentibus, pectore aurato tomento obsito.

The above insect was taken at Fernando Po by my gallant friend Captain Downes ; I have also received it from Cape Palmas. *Mallodon picipennis* and *Raddoni* are also taken at Sierra Leone.

Sp. 48. *Acanthophorus Palinii*, Hope. Long. lin. 17 ; lat. lin. 6. Piceo-brunneus, antennis piceis, thorace marginato 3-dentato, anticis spinis majoribus et recurvis, posticis minutis. Thorax flavo-tomentosus, elytris piceis, maculis plurimis villosis obsitis. Corpus infra flavo-tomentosum, tarsis infra rubro-spongiosis.

The above insect was sent to me by Mr. Palin, who fell a victim to the unhealthy climate of Sierra Leone.

Sp. 49. *Acanthophorus longipennis*. Long. lin. 33 ; lat. lin. 11. Piceus, thorace marginato 3-dentato, dentibus fere æqualibus, disco in medio tuberculato. Elytra valde elongata, picea, ad humeros parum scabra, maculisque irrorata, lineis longitudinalibus vix distinctis. Corpus infra rubro-piceum, pedibus concoloribus.

Hab. Sierra Leone.

*Phyllarthrius**, novum genus.

Antennæ articulo 1^{mo} crasso, 2^{do} minore, 3^{tio} minimo, 6 sequentibus gradatim increscentibus et foliaceo-ramosis, externo articulo fere ovali, apice subacuto.

Thorax fere orbicularis lateribus haud spinosis.

Elytra ad apicem gradatim increscentia, rotundata.

Pedes femoribus quatuor anticis incrassatis, posticis longioribus et parum dilatatis.

The above characters will at once sufficiently distinguish it from *Amphidesmus*, Esch., to which it approaches in form : its true locality in the system is doubtful.

Sp. 50. *Phyllarthrius Africanus*. Long. lin. $6\frac{1}{2}$; lat. lin. $1\frac{3}{4}$. Flavus, antennis atris, sex ultimis articulis foliaceis, thorace fere rotundato, elytris postice sensim increscentibus flavis, apicibus autem nigris, totum corpus infra nigrum tarsis solummodo auricomatis.

* From φύλλον and ἀρθρον, leaf-jointed *Cerambyx*.

The above insect was received from Sierra Leone and was collected by Mr. Palin.

Sp. 51. *Phyllarthrus unicolor*. Long. lin. 5; lat. lin. $1\frac{1}{4}$. Rubropiceus, thorace orbiculari, antennis binis primis articulis nigricantibus, reliquis flavo-piceis. Elytra concoloria. Corpus infra testaceo-rubrum, femoribus incrassatis.

The above insect was received from Ashantee.

Sp. 52. *Hamaticherus signaticollis*, Hope. Long. lin. 10; lat. lin. $2\frac{1}{2}$. Niger, antennis corpore longioribus, thorace 4-maculato, maculis flavo-sericeis. Elytra ad apicem abrupte truncata linea aurato-sericea longitudinali conspicua, reliqua parte disci atra. Corpus infra nigrum, segmentis abdominis argenteo-sericeis, pedibus nigricantibus, tarsis infra flavo-spongiosis.

Hab. Circa Palmas.

The above species will at some future time be regarded as the type of a subgenus allied to *Hamaticherus*.

Sp. 53. *Hamaticherus viridipennis*. Long. lin. 12; lat. lin. 4. Viridinitens, thorace nigro rugisque transversis obsito, elytris viridibus, ad apicem abrupte truncatis et sub lente subtilissime punctulatis. Corpus infra atro-piceum, antennis pedibusque rubris.

Hab. Circa Sierram Leonam.

Sp. 54. *Hamaticherus pilosicollis*. Long. lin. 10; lat. lin. 3. Viridis, capite thoraceque flavis capillis obsitis, disco supra linea longitudinali, maculaque utrinque nigra nitida insignito. Elytra viridia nitida ad apicem rotundata, sub lente vix punctulata. Corpus infra nigrum flavisque capillis obsitum, pedibus concoloribus.

Hab. Circa Palmas.

Sp. 55. *Hamaticherus glabricollis*. Long. lin. $8\frac{1}{2}$; lat. lin. $2\frac{1}{2}$. Viridis, antennis rubro-piceis, thorace nigro lateribus rugosis. Elytra ad apicem truncata subbispiñosa viridia nitida sub lente vix punctata. Corpus infra nigrum, pedibus segmentisque abdominis postice rubro-piceis.

Hab. Circa Palmas.

The above three species are all metallic, and appear to belong to a peculiar section. I am also acquainted with others from the same locality.

Sp. 56. *Ionthodes amabilis*. Long. lin. 11; lat. lin. 3. Affinis *formosæ*, Serville, at major. Caput atrum, antennis pedibusque rubris. Thorax niger, maculis argenteis insignitus, binis flavis in medio disci positus, binisque aliis albidis utrinque ad latera conspicuis. Elytra læte purpurascentiã in quibusdam locis obscura. Corpus infra nigro-sericeum.

This lovely insect inhabits Sierra Leone.

Sp. 57. *Callichroma assimile*. Long. lin. 10; lat. lin. $2\frac{1}{2}$. Affine *Call. Afro*, Fab. et *Cer. nitenti*, Olivier. Viridinitens, antennis pedibusque ferrugineo-flavis, thorace rotundato subspinoso, transverse rugoso viridique aurato. Scutellum læte aureum, elytris vi-

ridibus suturaque interne aureo-vittata. Corpus infra aureum et punctatum.

Hab. Circa Sierram Leonam.

Sp. 58. *Callichroma lætum*, Hope. Long. lin. 15 ; lat. lin. $4\frac{1}{2}$. Cyaneum aut læte viride, antennis nigris, thorace utrinque fortiter spinoso, dorso subtuberculato. Scutellum rugis transversis impressum et auratum. Elytra læte purpurea aut viridia punctulata, corpore infra concolori. Tarsi supra argentei infraque flavo-spongiosi.

Hab. Circa Palmas.

This splendid insect varies considerably in its colouring, being sometimes purple, blue and green ; it is closely allied to the *C. albotalarsis* of Fabricius.

Sp. 59. *Callichroma atripenne*, Hope. Long. lin. $12\frac{1}{2}$; lat. lin. 4. Atrum, antennis pedibusque rubris, thorace utrinque subspinoso, rugisque transversis impresso. Corpore infra aurato tomentoso.

The above insect I have received from Cape Palmas and also from Sierra Leone.

Sp. 60. *Callichroma igneicolle*. Long. lin. $12\frac{1}{2}$; lat. lin. $2\frac{1}{2}$. Viola-ceum, antennis nigricantibus. Caput læte auratum. Thorax utrinque spinosus, igne auroque æstuans. Elytra elongata interne viridia lateribus violaceis. Corpus infra auratum, pedibus violaceis.

The above insect seems to unite in itself the Asiatic and African *Callichromidæ* ; it was received lately from Ashantee, and is one of the most beautiful insects found in Africa.

Sp. 61. *Promeces carbonarius*. Long. lin. $9\frac{3}{4}$; lat. lin. 2. Niger, antennis atro-violaceis, thorace fere rotundato utrinque subtuberculato, corpore infra concolori, pedibus rubris, femoribus quatuor anticis incrassatis, reliquis elongatis.

It inhabits the vicinity of Sierra Leone.

Sp. 62. *Euporus amabilis*. Long. lin. 6 ; lat. lin. $\frac{3}{4}$. Cyaneus, antennis purpurascens, capite læte viridi, thorace cyaneo, dorso varioloso-punctato. Scutellum aureum, elytra ad humeros violacea, interne viridia et ad latera atro-cyanea. Corpus infra viride, femoribus cyaneis, tibiis posticis binis in medio rubris.

Hab. Circa Palmas.

Sp. 63. *Euporus chryscollis*. Long. lin. 7 ; lat. lin. 1. Viridis, capite antice concolori posticeque cyaneo. Antennæ violacæ. Thorax aureus, fortissime punctatus. Elytra in medio obscure viridia, sutura aureo-virescente lateribus externe violaceis. Corpus infra auratum nitidum et punctatum, pedibus cyaneis.

This species was given me by Captain Downes, and taken by him at Fernando Po ; it is closely allied to the insect above described under the name of *amabilis*.

Sp. 64. *Sternodonta Palinii*. Long. lin. 9 ; lat. lin. $2\frac{3}{4}$. Viridis, antennis atris, articulo 1^{mo} cæruleo. Capite fronte viridi posticeque atro. Thorax ater, antice et postice linea transversa virescenti

notatus, aliaque media aurantia. Elytra nigra fascia humerali aurantia, secunda fere media, duabus maculis concoloribus fere ad apicem positis. Intra humeralem fasciam et apicem totum discum maculis minutis viridibus aspersum. Corpus infra viride, pectore utrinque aurantio colore imbuto.

The above elegant insect is named after Mr. Palin, an assiduous collector of insects at Sierra Leone.

Sp. 65. *Sternodonta Princeps*. Long. lin. 13; lat. lin. 6. Atroviridis, antennis pallidioribus, thorace 4 lineis transversis albidis notato, elytris disco nigro binis fasciis obliquis variisque maculis albido beryllinis insignitis. Corpus infra nigrum, segmentis abdominis beryllino-viridibus.

Received from Ashantee in 1833.

Sp. 66. *Sternodonta amabilis*. Long. lin. 12; lat. lin. 5. Affinis *Stern. Imperiali*, at major. Viridis, corpore pulvere fulvo aurato, fere omnino tecto. Thorax medio aurantius, antice posticeque viridis. Elytra læte beryllino-viridia, ad basem nigra fascia notata, maculisque variis aurantiis conspicua. Corpus infra læte viride, pedibus concoloribus.

The above insect is one of the most beautiful received from Africa. It was obtained from the country of the Ashantees.

LII.—*Some remarks on the Soft-billed Duck of Latham.*

By GEORGE ROBERT GRAY, Esq.

AMONG the ducks described by Latham in his 'Synopsis' is one that he denominated the Soft-billed Duck. It was first noticed however by Cook and Forster in their Voyages, and to them Dr. Latham was indebted for the information which supplied the material for his description. A representation of this curious and rare species of duck is given by G. Forster among his drawings, tab. 74. Gmelin was the first to give a scientific name, which he did by translating Latham's, as *Anas malacorhynchus*. The specimens which have again brought it into notice have recently been presented to the National Collection by the New Zealand Company; they are two in number, and were brought from New Zealand by Dr. Dieffenbach; it is thus that the writer has had it in his power to examine it and to compare it with the Australian soft-billed duck. He soon discovered that Wagler was in error in considering it as belonging to the same division. From the form of the hind toe, the Australian species is a true duck near the Shovellers; while the present bird is more properly placed with the lobed hind-toed ducks, such as the Pochards, and partaking in some measure of the form of the Goosanders. It should therefore be placed in the subfamily *Fuligulinæ* between *Camptolaimus*